## ABSTRACT

A moving picture encoding method capable of using a reference frame number in multi-frame motion prediction and variable-length code reference frame information corresponding to the number includes the steps of:

5 calculating a reference frequency of the reference frame; acquiring, with the reference frequency, reference frame identification information so that a ratio of a reference frame index code occupying a bit stream is reduced; and multiplexing the reference frame identification information together with encoded moving picture data. Instead of the calculation of the reference frequency, the reference frequency of the reference frame may be estimated by calculating a frame similarity.